IN THE CLAIMS

Please amend the claims as follows:

1. (original) A method for the heating of magnetic particles which are present in a target region, which method includes the steps of

a) generating a magnetic field whose magnetic field strength varies in space in such a manner that a first sub-region (301) having a low magnetic field strength and a second sub-region (302) having a higher magnetic field strength are formed in the target region,

b) changing the position in space of the two sub-regions in the target region for so long and with such a frequency that the target region is heated.

2. (original) A method as claimed in claim 1, in which a spatially and temporally variable magnetic field is generated in order to change the position in space of the two sub-regions in the target region.

3. (original) The use of monodomain particles of a ferromagnetic material or a ferrimagnetic material in a method as claimed in claim 1.

4. (original) The use of multidomain particles of a ferromagnetic material or a ferrimagnetic material in a method as claimed in claim 1.

5. (original) The use of substrates which have dimensions in the μm range and are provided with a layer of a ferromagnetic soft material which is thin in comparison with said dimensions as multidomain particles as claimed in claim 4.

6. (currently amended) The use of the particles claimed in claim 3 ~~or 4~~ in a colloidal dispersion.

7. (original) The use of particles enclosed by a molecular envelope for tissue-specific concentration in a method as claimed in claim 1.

8. (original) The use of particles in a method as claimed in claim 1, where the Curie temperature of the particles corresponds to the temperature prevailing in the target region after the desired heating or corresponds to a maximum permissible temperature in the target region.

9. (original) An arrangement for carrying out the method claimed in claim 1, which arrangement includes

a) means for generating a magnetic field whose magnetic field strength varies in space in such a manner that a first sub-region (301) having a low magnetic field strength and a second sub-region (302) having a higher magnetic field strength are formed in the target region,

b) means for changing the position in space of the two sub-regions in the target region for so long and at such a frequency that the target region is heated.

10. (original) An arrangement as claimed in claim 9, in which the means for generating the magnetic field include a permanent magnet arrangement for generating a magnetic gradient field whose direction is reversed in the first sub-region of the target region and which comprises a zero-crossing.

11. (original) An arrangement as claimed in claim 9, in which the means for generating the magnetic field including a gradient coil system for generating a magnetic gradient field whose direction is reversed in the first sub-region of the target region and which comprises a zero-crossing.

12. (original) An arrangement as claimed in claim 9, comprising means for generating a magnetic field which is superposed on the magnetic gradient field and which varies in time in order to shift the two sub-regions in the target region.

13. (original) An arrangement as claimed in claim 9, comprising means for generating a first magnetic field and at least two further magnetic fields which are superposed on the magnetic gradient field, the first magnetic field being variable rapidly in time and with a low amplitude whereas the two further magnetic fields are variable slowly in time and with a high amplitude.

14. (original) An arrangement as claimed in claim 13, in which the three magnetic fields extend essentially perpendicularly to one another in the target region.